Ronald Gene Askin

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  3619 N 49th Street
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  School of Computing, Informatics, and Decision Systems Engrg.
  Ira A. Fulton Schools of Engineering
  Arizona State University
  Tempe, AZ 85287-8809
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BACKGROUND:

Education:
> Ph.D., School of Industrial and Systems Engineering
>> Georgia Institute of Technology, Atlanta, GA, 1979
>
> Master of Science in Operations Research
>> Georgia Institute of Technology, Atlanta, GA, 1976
>
> Bachelor of Science in Industrial Engineering
>> Lehigh University, Bethlehem, PA, 1975

Professional Registration:
> Engineer in Training, PA

Major Fields of Professional Interest and Expertise:
> Design and Analysis of Manufacturing Systems; Logistics; Engineering Statistics; Operations Research

Professional Experience:

2009 – present   Professor, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, Tempe, AZ (Member of Industrial Engineering, Computer Engineering and Statistics Graduate Faculties)

2009 – 2016   Director, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University

2006-2009   Professor and Chair, Dept. of Industrial Engineering, Arizona State University, Tempe, AZ

1999-2005   Head, Dept. of Systems and Industrial Engineering, The University of Arizona, Tucson, AZ

1992- 2005   Professor, Dept. of Systems and Industrial Engineering, The University of Arizona, Tucson, AZ (Acting Dept. Head, Jan. – Dec. 1996; Interim Head 1998-1999)

Jan-May 1992   Visiting Research Scientist, Dept. of Industrial Engineering, North Carolina State University, Raleigh, NC

1985-1992   Associate Professor, Dept. of Systems and Industrial Engineering, The University of Arizona, Tucson, AZ

1984-1985   Associate Professor, Dept. of Industrial and Management Engineering, The University of Iowa, Iowa City, IA

1979-1984   Assistant Professor, Dept. of Industrial and Management Engineering, The University of Iowa, Iowa City, IA

1976-1979   Graduate Teaching/Research Assistant, School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA

Summer 1974   Assistant to Manufacturing Manager, C. M. Kemp Manufacturing Co., Glen Burnie, MD

Summer 1973   Engineering Trainee, Baltimore Gas and Electric Co., Baltimore, MD

Summer 1972   Engineering Assistant, Rummel, Klepper and Kahl, Consulting Engineers, Baltimore, MD

Consulting:
        General Dynamic C4 Systems, Phoenix, AZ, 2010-2011
        ITESM, Monterrey, MX, 2006
        Health Analytics, 2005
        American Express Travel Services, 1995
        Magma Copper Co., 1992-1993
        3M, Tucson, AZ, 1990
        Burr Brown, Tucson, AZ, 1988
        Hughes Missile Systems, 1986
        IBM, various locations, 1985-1987
        ALCOA, Bettendorf, IA, 1984
        Conrad American Corp., Mt. Pleasant, IA, 1981
        Expert Witness, East Moline, IL, 1980-1986
        Olan Mills Inc., Chattanooga, TN, 1979

Professional Society Memberships:
        Alpha Pi Mu – Member
        American Society for Engineering Education (ASEE) – Member
        Institute for Operations Research and Management Science (INFORMS) – Member
        Institute of Industrial Engineers (IIE) – Fellow
        Society of Manufacturing Engineers (SME) – Member
        Tau Beta Pi - Member

Honors and Awards:
        Albert G. Holzman Distinguished Educator Award, IISE, 2017
        Distinguished Alumni Award – Academia, Dept. of Industrial & Systems Engr., Lehigh University, 2016
        Distinguished Educator Award, IEOM Society, 2016
        IIE Transactions on Design and Manufacturing Best Paper Award (1998, 2000)
        U of A SIE Department Outstanding Service Award (1997)
        Listed in Who's Who in Science and Engineering
        Elected Fellow of the Institute of Industrial Engineers (1995)
        Award for Excellence at the Student Interface, SIE Department (1994, 1997, 1998)
        IIE Joint Publishers Book-of-the-Year Award (1994, 2003)
        Shingo Prize for Excellence in Manufacturing Research (1994)
        Nominated (by anonymous students) for Five Star Faculty Award (1988)
        Eugene L. Grant Award (Best *Engineering Economist* paper 1986)
        Listed in Who's Who in Technology
        IIE Transactions Development and Application Award (1985)
        Thesis Advisor for IIE Graduate Research Award recipient (1984, 1989)
        NSF Presidential Young Investigator Award (1984)
        Listed in American Men and Women of Science
        Outstanding Young Men of America (1981)
        President's Fellowship for Graduate Study (1975)
        Graduated with Highest Honors (1975)
        Freshman, Sophomore, Junior and Senior Honors (1972-1975)
        Phi Eta Sigma, Freshman Honor Society (1971)

TEACHING:

Regular Courses Taught (G = Graduate, U = Undergraduate):

Advanced Quality Engineering (G)
Advanced Manufacturing Systems Modeling (G)
Analysis of Decision Processes (G)
ASU Experience (U)
Computer-Integrated Manufacturing Systems (G)
Design of Experiments (G)
Doctoral Colloquium (G)
Engineering Statistics (G)
Facility Layout and Location (G)
Integrated Manufacturing Systems (U)
Integrated Product and Process Development Methodologies (G)
International Logistics (G)
Introduction to Industrial and Manufacturing Engineering (U)
Introduction to Systems Engineering (co-taught) (G)
Modeling Manufacturing Systems (U/G)
Operational Systems Design (Plant Layout & Material Handling) (U)
Operations Research I (U)
Probability and Statistics for Engineering & Physical Sciences (U)
Production Systems (U)
Production Systems Analysis (G)
Professional Seminar (U)
Project Management (co-taught) (G)
Regression Analysis (G)
Sequencing and Scheduling (G)
Seminar in Production/Inventory Models (G)
Statistical Design and Process Analysis (G)
Statistical Quality Control (U)

Ph.D. Committees (Major Advisor):

[1] Moeed Haghnevis, (Co-Chair) "A Framework for Complex Adaptive Systems", 2013.

[2] Mingjun Xia, "Optimal Stocking Locations and Frequencies for Supply Chains", 2013.

[3] Mengying Fu, (Co-Chair) "Planning and Scheduling of Assembly and Test Facilities", 2011.

[4] Rosa Gonzalez, (Co-Chair) "District Design for a Parcel Delivery and Pickup Problem", ITESM-Monterrey, 2009.

[5] Shravan Krishnan, "Selection of Inventory Control Points in Multistage Pull Production Systems", 2007.

[6] Jiaqiong Chen, "Project Selection and Scheduling for Engineering Design Groups", 2005.

[7] Mary Beth Kurz, "Flow Shop Scheduling with Sequence Dependent Setups", 2001.

[8] Yuanshu Huang, "Employee Training and Assignment for Team-Based Manufacturing Cells", 1999.

[9] Donald Dawson, "Optimal Parameter Setting in Quality Function Deployment", 1997.

[10] Anand Iyer, "Worker Assignment and Shop Loading in Manufacturing Cells", 1996.

[11] Ming Zhou, "The Generalized Group Formation Problem", 1995.

[12] Hassan Selim, (Co-Chair) "A Flexible Cell Formation Approach for Cellular Manufacturing", 1993.

[13] Johann G. Demmel, "Strategic Multiobjective Decision Making for the Evaluation of Advanced Manufacturing Systems Technologies", 1991.

[14] M. George Mitwasi,"Math. Models for the Deterministic, Capacitated, Single Kanban System", 1991.

[15] Manbir Sodhi, (Co-Chair) "An Hierarchical Model for FMS Control", 1991.

[16] Ali H. Krisht,"Optimization Schemes for Queueing Networks with Applications to FMSs", 1990.

[17] Ageli F. Elmeri, (Co-Chair) "A Heuristic Algorithm for the Classification Problem", 1984.

M.S. Theses (Major Advisor):

[1] Runfeng Mao, "Platelet Processing and Inventory Management", expected 2016.

[2] Xiaoyan Li, "Capacitated Vehicle Routing Problem with Time Windows: A Case Study on Pickup of Food Products in Nonprofit Organization", 2015.

[3] Shiyang Huang, "An Optimization Model for Timetabling and Vehicle Assignment for Urban Bus Systems", 2014.

[4] Pranati Sahu, "A Simulation Study of Kanban Levels for Serial and Assembly Systems", 2012 (co-advisor).

[5] Paula deSzoeke, "Fidelity and Consistency of Human Decision Making in Multistage Games", 2008.

[6] Shrikant Jarugumilli, "Capacity Allocation Models for Semiconductor Manufacturing Assembly-Test Operations", 2008 (co-advisor).

[7] Sachin Kavathar, "Forming Effective Worker Teams Using Multifunctional Skill Requirements", 2004.

[8] Shishir Shenoy, "Evaluation of Approaches for Global Logistics System Design", 2003.

[9] Shravan Krishnan, "The Effect of Ordering Policies on the Performance of Supply chains", 2003.

[10] Jaichander Sekaran, "On the Sizing and Use of Transfer Batches in Dynamic Flow Shops", 2003.

[11] Jiaqiong Chen, "Dynamic Task Assignment for Throughput Maximization with Worksharing", 2002.

[12] Erin Fitzpatrick, "Forming Effective Teams in a Workplace Environment", 2000.

[13] Gopal Bethmangalkar, "Optimal Allocation of Pallets in Closed Queuing Networks", 1999.

[14] Desikan Madhavanur, "On the Use of Transfer Batches in Flow Shops", 1998.

[15] Nicklas Lundgren, "Layout Alternatives for Agile Manufacturing", 1997.

[16] Anand Iyer, "A Comparison of Scheduling Philosophies for Cellular Manufacturing", 1992.

[17] Kah-Mun Cheh (co-advisor), "An Investigation of Neighborhood Size in Simulated Annealing", 1989.

[18] Marilyn Halverson, "OFFLAY: A Computerized Solution Approach for Office Layout",1988.

[19] Paul Ritchie, "A Systematic Experimental Methodology for Design Optimization", 1987.

[20] Mousa Mitwasi, "Integrated Facility Layout, Process and Production Planning", 1987.

[21] Simon Chiu, "A Two-stage Economic Graph Partitioning Procedure for Group Technology",1987.

[22] Margaret Samson, "Graphical Aids for Facility Layout", 1987.

[23] Sridhar Subramanyam, "An Expert Systems Approach to Scheduling in FMS", 1985.

[24] Chan Ong, "A Penalty Cost Approach to Scheduling Storage/Retrieval Systems", 1985.

[25] S. P. Subramanian, "An Economic Machine-Component Clustering Heuristic for GT", 1984.

[26] Michael Hu, "Microcomputer-Aided Facility Layout Via Graphics", 1984.

[27] Chihsiang S. Liu, "Dynamic Lot-Sizing in Rolling Schedule Environments", 1984.

[28] Edyth M. Paul, "POPS/A Production Operations Planning System", 1983.

[29] Robert A. Walas, "A Heuristic Algorithm for Combined Location and Sequencing Problems", 1983.

[30] Pratap G. Reddy, "Computerized Facility Layout Via Graphics (COFLAG)", 1983.

[31] Liann Chuen Chou, "A Comparison of Lot-Sizing for MRP", 1982.

[32] M. Raghavan,"A Study of Implementing Lot-Sizing in MRP", 1980.

M.S. Project (Major Advisor):

[1] Sam Hu, "A Depot Location Model for the Physical Internet", 2014.

[2] Rosa Gonzalez, "Shipment Consolidation Strategies for Binational Aerospace Suppliers", 2007.

[3] Deepthi Krishnamoorthy, "Comparison of Two and Three Stage Distribution Networks", 2004.

[4] Carlos Colon, "Evolved Sea Sparrow Missile Production Simulation", 2001.

[5] Carlos Galliano, "Active Optical Target Detection Production Simulation", 2000.

[6] Robert W. Soehl, "A Computational Package for Mean Value Analysis", 1999.

[7] Mary-Lisa Orth, "Test, Analyze and Fix as Compared to Highly Accelerated Life Testing", 1999.

[8] Kaustubh Deshpande, "Evaluation of Search Techniques for Machine and Worker Cell Formation", 1998.

[9] Ronnie Williams, "Agile Manufacturing and its Implementation on a Missile Manufacturing Line", 1998.

[10] Nichole Hocheder, "Application of Systems Engineering to Missile Project Management", 1998.

[11] Jeffrey Jo and Oktay Gumus, "An Integrated Assembly and Warehousing System", 1996.

[12] Jamie Robinson, "A Simulation Model Analysis of a Serial Assembly System", 1995.

[13] Yuanshu Huang, "A Travel Time Model for a Tray Mail Transportation System", 1995.

[14] Anne McBride and Joe Macuilla, "Manufacturing Assembly Selection System", 1994.

[15] Ramesh Devaraj, "Development of an Automated Machining and Quality Assurance Cell", 1989.

[16] Rajesh Rajani, "Automated Tool Path Generation for Pocket Milling", 1989.

[17] Mary Ann Suozzi, "Microcomputer Package for Operating Characteristic Curves in SQC", 1988.

[18] Andrew Binder, "An Analysis of Built-in-Test Performance", 1988.

[19] Cindy Brocious, "Material Handling Graphics Package", 1988.

[20] Ralph Joseph, "Computer Code to Generate a Part Program in CNCS", 1987.

[21] Yung-Jung Chen, "Multicriteria FMS Loading Heuristics", 1987.

[22] S. Bose, "CAD System for Circuit and Assembly Planning", 1987.

RESEARCH:

Principal investigator on contracts and grants:

[1] "Accelerating Operational Efficiency", (Co-PI, 10%), DHS, $3,850,000, 2017-2018.

[2] "Robust Sourcing and Model Allocation", GM, $50,000, 2017.

[3] "BRAID Initiative for Women and Minorities in Computing", BRAID Coalition, $60,000, 2015-2017.

[4] "Data Optimization Analyses", (Co-PI, 33%), Cavalry Portfolio Services, $117,000, 2012-2013.

[5] "Assembly and Test Factory Capacity Allocation", (Co-PI, 50%), Intel, $245,000, 2008-2010.

[6] "CELDi: Center for Engineering Logistics and Distribution Planning Grant", (co-Investigator, 33%), NSF, $10,000, 2007-2008.

[7] "DDDAS-SMRP: Dynamically Integrated Production Planning and Operational Control for the Distributed Enterprise", (co-Investigator, 50%), NSF, $30,000 exploratory grant, 2005-2006.

[8] "Homeland Security Scenario Investigation", (co-Investigator, 33%), HSI, $50,000, 2005.

[9] "Hybrid Inferencing from Fused Information", (co-Investigator, 10%), DARPA, $3,987,238, 2003-2008.

[10] "Development of a Web Course in Project Management", (co-Investigator, 50%), University of Arizona, $15,000, 2002.

[11] "Symposium: Group Technology and Cellular Manufacturing", (co-Investigator, 50%), NSF, $10,000, 2001.

[12] "Modeling and Analysis of Production and Manufacturing Systems", CETYS Universidad, $9,100, 2000 (Educational).

[13] "Employee Training and Assignment for Team-Based Manufacturing Systems", NSF, $159,760. 1999-2001.

[14] "Reliability Modeling under Multimodal Stresses and Aging" Hughes Missile Systems/Raytheon, $32,450, 1998.

[15] "Productivity and Capacity Enhancement Through Layout Design", Modular Mining, $10,000, 1996.

[16] "Graduate Assistance in Areas of National Need: Systems Engineering", (co-PI, 20%), Dept. of Education, $585,000, 1995-1998.

[17] "Research Experiences for Undergraduates", NSF, $10,000, 1994-1995.

[18] "Joint AZ Center for Manufacturing Engineering", (with J. Sevier), TRP/ASU, $126,000, 1994-1998.

[19] "Tray Management Systems", (with J. Goldberg and S. Jagdale), Hughes Missile Systems, $60,000, 1994.

[20] "Cellular Manufacturing", (R. Askin, PI; C. T. Culbreth, R. King, J. Trevino, A. Vakharia, Co-PIs), NSF, $600,000, 1993-1996.

[21] "Information Systems Design for Engineering Design Systems", (with J. Ramberg and O. Sheng), NSF, $100,000, 1990-1992.

[22] "Modeling In-Process Inventory", 3M Corp., $12,950, 1990-1991.

[23] "Facility Layout Modeling", Auto-Trol Technologies, $40,000, 1985-1986.

[24] "Graphics for Production Design (Hardware)", Apollo Computer Co., $26,000, 1985.

[25] "Production and Capacity System Evaluation", Hughes Aircraft Co., $50,000, 1985-1989.

[26] "Manufacturing Lab Development", (with S. Sen and T. C. John), AT&T, $26,000, 1986-1987.

[27] "Development of Algorithms for Production Decision Support Systems", NSF, $250,000, 1984-1990.

[28] "Identification of Industrial Work Methods Associated with Low Back Disorders" (with J. R. Buck), NIH, $20,000, 1982-1983.

[29] "Production Operating System Design, Evaluation and Control Simulator", NSF, $48,000, 1982-1984.

[30] "An Interactive Computer Aided Algorithm for Plant Layout Design and Analysis", University of Iowa, $3,000, 1982.

Books and Book Chapters:

[1] Askin, R. G. and J. B. Goldberg, *Design and Analysis of Lean Production Systems*, John Wiley & Sons, New York, 2002.

[2] Askin, R. G. and S. Estrada, "An Investigation of Cellular Manufacturing Practices" in *Handbook of Cellular Manufacturing*, S. Irani (Ed.), John Wiley & Sons, New York, 1999, pp. 25 - 34.

[3] Iyer, Anand, and R. G. Askin, "Operating Manufacturing Cells with Labor Constraints", in *Handbook of Cellular Manufacturing*, S. Irani (Ed.), John Wiley & Sons, New York, 1999, pp. 195 - 224.

[4] Askin, R. G. and A. Iyer, "Classification and Analysis of Operating Policies for Manufacturing Cells", in *Group Technology and Cellular Manufacturing: A State-Of-The-Art Synthesis of Research and Practice*, Suresh, N. C. and Kay, J.M., (Eds.), Kluwer Academic Publishers, Boston, 1998, pp. 362-379.

[5] Vakharia, A.J., R.G. Askin and H.M. Selim, "Flexibility Considerations in Cell Design," in *Handbook of Cellular Manufacturing*, S. Irani (Ed.), John Wiley & Sons, New York, 1999, pp. 249 - 274.

[6] Askin, R. G., B. Bidanda, S. Jagdale (Eds.), *Proceedings of the 5th IERC*, Minneapolis, 1996.

[7]   Askin, Ronald G., J. S. Ramberg, and M. Sodhi, "Quality Engineering", *Integrated Product, Process and Enterprise Design*, B. Wang (Ed.), Chapman and Hall, New York, 1997, pp. 143 - 192.

[8]   Askin, Ronald G. and Manbir Sodhi, "Organization of Teams in Concurrent Engineering", *Handbook of Manufacturing and Automation*, R. Dorf and A. Kusiak (Eds.), John Wiley & Sons, New York, 1994, pp. 85 - 105.

[9]   Demmel, Johann G. and Ronald G. Askin, "Integrating Financial, Strategic and Tactical Factors in Advanced Manufacturing System Technology Investment Decisions", *Economic and Financial Justification of Advanced Manufacturing Technologies*, Hamid Parsaei and William Sullivan (Eds.), 1992, Elsevier Science Publishers, pp. 209 - 243.

[10]   Askin, Ronald G. and Charles R. Standridge, *Modeling and Analysis of Manufacturing Systems*, John Wiley & Sons, Inc., New York, 1993.

[11]   Askin, Ronald G. and Asoo Vakharia, "Group Technology: Planning and Operation", *The Automated Factory Handbook: Technology and Management*, David I. Cleland and Bopaya Bidanda (Eds.), TAB Books, 1990, pp. 317-366.

Refereed Journal Publications:

[1]   Haghnevis, M., R. G. Askin and D. Armbruster, "An Agent Based Modeling Optimization Approach for Understanding Behavior of Engineered Complex Adaptive Systems", *Socio Economic Planning Sciences*, 56, 2016, pp. 67-87. doi:10.1016/j.seps.2016.04.003.

[2]   Fu, M., R. G. Askin, J. Fowler, M. Zhang, "Stochastic Optimization of Product-Machine Qualification in a Semiconductor Back-end Facility", *IIE Transactions*, 47(7), 2015, pp. 739-750. DOI: 10.1080/0740817X.2014.964887.

[3]   Askin, R. G., "Contributions to the Design and Analysis of Cellular Manufacturing Systems", *International Journal of Production Research*, 51(23), 2013, pp. 6778-6787. DOI:10.1080/00207643.2013.825745.

[4]   Askin, R. G., I. Baffo and M. Xia, "Multicommodity Warehouse Location and Distribution Planning with Inventory Consideration", *International Journal of Production Research*, 52(7), 2014, pp. 1897-1910. DOI: 10.1080/00207543.2013.787171

[5]   Haghnevis, M. and R. G. Askin, "A Modeling Framework for Engineered Complex Adaptive Systems", *IEEE Systems Journal*, 6(3), 2012, pp. 520-530.

[6]   Fu, M., R. G. Askin, J. Fowler, M. Zhang, M. Haghnevis, N. Keng, and J. Pettinato, "Batch Production Scheduling for Semiconductor Back-End Operations", *IEEE Trans. on Semiconductor Manufacturing*, 24(2), 2011, pp. 249-260.

[7]   González-Ramírez, R., N. R. Smith, R. G. Askin, P. A. Miranda, J. M. Sánchez, "A Hybrid Metaheuristic Approach to Optimize the Districting Design of a Parcel Company", *Journal of Applied Research and Technology*, 9(1), 2011, pp. 19-35.

[8]   Askin, R. F Camacho, V. Kalashnikov, and N. Kalashnykova, "Comparison of Algorithms for Solving a Bi-Level Toll Setting Problem", *International Journal of Innovative Computing, Information, and Control*, 6(8), 2010.

[9]   González-Ramírez, R., N. R. Smith, and R. G. Askin, "A Heuristic Approach for a Multiproduct Capacitated Lot-Sizing Problem with Pricing", *International Journal of Production Research*, 49(4), 2011, pp. 1173-1196. doi:10.1080/00207540903524482

[10]   González-Ramírez, R. G., N. R. Smith, R. G. Askin, and V. Kalashinkov, "A Heuristic Approach for a Logistics Districting Problem", *International Journal of Innovative Computing, Information and Control*, 6(8), 2010, pp. 3551-3562.

[11]   González-Ramírez, R. G., R. G. Askin, N. R. Smith, and R. Villalobos, "Shipment Consolidation by Terminals and Vehicles", *Revista de Matemática: Teoría y Aplicaciones*, 16(1), 2009, pp. 178-187.

[12]   Askin, R. G. and S. Krishnan, "Defining Inventory Control Points in Stochastic, Multistage Pull Systems", *International Journal of Production Economics*, 120, 2009, pp. 418-429. doi:10.1016/j.ijpe.2008.11.020

[13]   Chen, J. and R. G. Askin, "Project Selection and Scheduling with Time Dependent Payoffs", *European Journal of Operational Research*, 193(1), 2009, pp. 23-34. DOI 10.1016/j.ejor.2007.10.040

[14]   Krishnan, S. and R. G. Askin, "Effect of Information Sharing and Control Strategies on Supply Chain Performance", *International Journal of Simulation and Process Modeling*, 2(3/4), 2006, pp. 175-187.

[15]   Chen, J. and R. G. Askin, "Throughput Maximization in Serial Production Lines with Worksharing", *International Journal of Production Economics*, 99, 2006, pp. 88-101.

[16]   Fitzpatrick, E. and R. G. Askin, "Forming Effective Worker Teams with Multifunctional Skill Requirements", *Computers and Industrial Engineering*, 48(3), 2005, pp 593-608.

[17]   Askin, R. G. and J. Chen, "Dynamic Task Assignment for Throughput Maximization with Worksharing, *European Journal of Operational Research*, 168(3), 2006, pp. 853-869.

[18]   Kurz, M. E. and R. G. Askin, "Scheduling Flexible Flow Lines with Sequence Dependent Setup Times", *European Journal of Operational Research,* 159(1), 2004, pp. 66-82.

[19]   Huang, W. and R. G. Askin, "A Generalized SSI Reliability Model Considering Stochastic Loading and Strength Aging Degradation", *IEEE Trans. on Reliability*, 53(1), 2004, pp. 77-82.

[20]   Kurz, M. E. and R. G. Askin, "Comparing Scheduling Rules for Flexible Flow Lines", *International Journal of Production Economics*, 85, 2003, pp. 371-388.

[21]   Huang, Wei and R. G. Askin, "Reliability Analysis of Electronic Devices with Multiple Competing Failure Modes Involving Performance Aging Degradation", *Quality and Reliability Engineering International*, 19, 2003, pp. 241-254.

[22]   Kurz, M. E. and R. G. Askin, "Scheduling Parallel Machines with Sequence Dependent Setup Times", *International Journal of Production Research*, 39(16), 2001, pp. 3747 - 3769.

[23]   Askin, R. G. and Y. Huang, "Forming Effective Worker Teams for Cellular Manufacturing", *International Journal of Production Research*, 39(11), 2001, pp. 2431 - 2451.

[24]   Kurz, M. B. and R. G. Askin, "A Note on 'An adaptable problem-space-based search method for flexible flow line scheduling'", *IIE Transactions*, 33(8), 2001, pp. 691-693.

[25]   R. G. Askin and D. Dawson, "Maximizing Customer Satisfaction by Optimal Specification of Engineering Characteristics", *IIE Transactions*, 32(1), 2000, pp. 9-20.

[26]   Askin, R. G., F. W. Ciarallo, and N. Lundgren, "An Empirical Evaluation of Holonic and Fractal Layouts", *International Journal of Production Research*, 37(5), 1999, pp. 961-978.

[27]   Dawson, D. and Askin, R. G., "Optimal New Product Design Using Quality Function Deployment with Empirical Value Functions", *Quality and Reliability Engineering International*, 15, 1999, pp. 17-32.

[28]   Iyer, A. and R. G. Askin, "Modeling and Simulating Operating Policies for Manufacturing Cells" *IIE Transactions*, 30(9), 1998, pp. 785-794.

[29]   Iyer, A. and R. G. Askin, "A General Framework for Comparing Operating Policies in Manufacturing Cells", *Annals of Operations Research*, 77, 1998, pp. 23-50.

[30]   Askin, R. G. and M. Zhou, "Formation of Independent Flow Line Cells Based on Operation Requirements and Machine Capabilities", *IIE Transactions*, 30(4), 1998, pp. 319-329.

[31]   Askin, R. G. and M. Zhou, "A Parallel Workstation Heuristic for Mixed-Model Assembly Line Balancing", *International Journal of Production Research*, 35(11), 1997, pp. 3095-3105.

[32]   Askin, R. G., A. J. Vakharia, and H. Selim, "A Methodology for Designing Flexible Cellular Manufacturing Systems", *IIE Transactions*, 29(7), 1997, pp. 599-610.

[33]   Selim, H., R. G. Askin, and A. Vakharia, "Cell Formation in Group Technology: Review, Evaluation, and Direction for Future Research", *Computers & Industrial Engineering*, 34(1), 1998, pp. 3-20.

[34]   Zhou, M. and R. G. Askin, "Formation of General GT Cells, An Operation-Based Approach", *Computers & Industrial Engineering*, 34(1), 1998, pp. 147-157.

[35]   Demmel, J. G. and R. G. Askin, "Multiobjective Evaluation of Advanced Manufacturing System Technology Investments with Risk". *IIE Transactions*, 28, 1996, pp. 249-259.

[36]   Askin, R. G. and A. H. Krisht, "Optimal Operation of Manufacturing Systems with Controlled WIP Levels", *International Journal. of Production Research*, 32(7), 1994, pp. 1637-1653.

[37]   Askin, R. G., M. Dror and A. Vakharia, "Printed Circuit Board Scheduling and Component Loading in a Multimachine, Openshop Manufacturing Cell", *Naval Research Logistics*, 41, 1994, pp. 587-608.

[38]   Sodhi, M. S., A. Agnetis, and R. G. Askin "Tool Addition Strategies for Flexible Manufacturing Systems", *International Journal of Flexible Manufacturing Systems*, 6(4), 1994, pp. 287-310.

[39]   Sodhi, M. S., R. G. Askin, S. Sen, "A Hierarchical Model for Control of Flexible Manufacturing Systems", *Journal of the Operational Research Society*, 45(10), 1994, pp. 1185-1196.

[40]   Mitwasi, M. G. and R. G. Askin, "Production Planning for a Multi-item, Single-stage Kanban System", *International Journal of Production Research*, 32(5), 1994, pp. 1173-1195.

[41]   Sodhi, M., R. G. Askin and S. Sen, "Multiperiod Tool and Production Assignment in Flexible Manufacturing Systems", *International Journal of Production Research*, 32(6), 1994, pp.. 1281-1294.

[42]   Askin, R. G. and A. Iyer, "A Comparison of Scheduling Philosophies for Manufacturing Cells", *European Journal of Operational Research*, 69, 1993, pp. 438-449.

[43]   Demmel, J. G., R. G. Askin, "A Multiple Objective Decision Model for the Evaluation of Advanced Manufacturing Systems Technologies", *Journal of Manufacturing Systems*, 11(3), 1992, pp. 179-194.

[44] Askin, R. G., M. G. Mitwasi and J. B. Goldberg, "Determining the Number of Kanbans in JIT Systems", *IIE Transactions*, 25(1), 1993, pp. 89-98.

[45] Askin, R. G., S. H. Creswell, J. B. Goldberg and A. J. Vakharia, "A Hamiltonian Path Approach to Reordering the Part-Machine Matrix for Cellular Manufacturing", *International Journal of Production Research*, 29(6), 1991, pp. 1081-1100.

[46] Cheh, K. M., J. B. Goldberg and R. G. Askin, "An Investigation of the Effect of Neighborhood Structure in Simulated Annealing", *Computers & Operations Research*, 18(6), 1991, pp. 537-547.

[47] Askin, R. G. and M. G. Mitwasi, "Integrating Facility Layout with Process Selection and Capacity Planning", *European Journal of Operational Research*, 57(2), 1992, pp. 162-173.

[48] Askin, R. G., and S. Chiu, "A Graph Partitioning Procedure for Group Technology Configuration," *International Journal of Production Research*, 28(8), 1990, pp. 1555-1572.

[49] Chen, Y.-J., and R. G. Askin, "Multicriteria Evaluation of FMS Loading Heuristics", *International Journal of Production Research*, 28(5), 1990, pp. 895-911.

[50] Askin, R. G. and J. B. Goldberg, "Economic Optimization in Product Design", *Engineering Optimization*, 14, 1988, pp. 139-152.

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Conference Proceedings and Other Invited and Reviewed Publications:

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[2]   Hu, Z. and R. G. Askin, "Logistic Network Design for Daily Cyclic Truck Routes", INFORMS TSL Conference, Chicago, IL, 2017, 5 page extended abstract.

[3]   Askin, R. G. and G. J. Hanumantha, "Analysis of Performance Approximations for Queueing Networks with Non-Homogeneous Arrival Processes", *Proceedings of the 11th Stochastic Models of Manufacturing and Service Systems Conference*, Lecce, Italy, 2017, pp. 123-130.

[4]   Askin, R. G. and G. J. Hanumantha, "Approximate Queueing Network Analysis for Nonstationary Demand", *Proceedings of the 8th IFAC Conference on Manufacturing Modelling, Management and Control,* Troyes, France, 2016, 6 pages.

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Seminars Presented (without Published Proceedings):

[1] Askin, R. G. "Integrated Capacity Planning and Scheduling for Assembly and Test Facilities", Universidad de los Andes, 2017.

[2] Askin, R. G., "When Will my Order be Done: Approximate Analysis of Queueing Networks with Nonstationary Demand", University of Wisconsin, 2016 (invited).

[3] Askin, R. G. and G. J. Hanumantha, "Approximate Analysis of Dynamic Production Systems for Nonstationary Demand", INFORMS International Conference, Waikoloa, HI, 2016.

[4] Askin, R. G., "Key Industrial Engineering Principles and Research Opportunities for Advancing Operations Management", Sixth International Conference on Industrial Engineering and Operations Management, Kuala Lumpur, Malaysia, March, 2016 (invited Keynote Lecture).

[5] Askin, R. G., "Industrial Engineering Research: Opportunities and Needs", XXI International Conference on Industrial Engineering and Operations Management, Aveiro, Portugal, 2015 (invited Keynote Address).

[6] Askin, R. G., "Capacity Allocation and Scheduling in Semiconductor Backend Facilities", Georgia Tech, Atlanta, GA, 2014 (invited) and Lehigh University, Bethlehem, PA, 2014.

[7] Askin, R. G. "Undergraduate Engineering Management Online" Panel Discussion, ISERC, Montreal, Canada, 2014 (invited).

[8] Askin, R. G. "University Scholarship- Tips for Publishing", New Faculty Colloquium, ISERC, Montreal, Canada, 2014 and Nashville, TN, 2015 (invited).

[9] Askin, R. G. "An Efficient Model for the Generalized Cell Formation Problem", ISERC, Montreal, Canada, 2014.

[10] Askin, R. G. "Consolidation", PASI 2013 Workshop on Modeling, Simulation and Optimization of Globalized Physical Distribution Systems, Santiago, Chile, 2013 (invited).

[11]   Askin, R. G., M. Haghnevis, D. Armbruster, "An Optimization and Agent-Based Socio-Technical Modeling Approach for Engineered Complex Adaptive Systems", Kinetic Theory for the Emergence of Complex Behavior in Social and Economic Systems Conference, Tempe, AZ, 2013.

[12]   Askin, R. G., "Leveraging Industry-University Collaboration to Impact Engineering Education", World Congress on Engineering Education, Doha, Qatar, 2013 (invited).

[13]   Askin, R. G., "Integrating Technical and Behavioral Factors to Form Effective Work Teams", Dept. of Industrial and Management Systems Engineering, University of South Florida, 2012 (invited).

[14]   Askin, R. G., "Publishing and Scholarship", IIE Doctoral Colloquium, ISERC, Orlando, FL, 2012 (invited).

[15]   Askin, R. G. and M. Xia, "Integrated Inventory Replenishment and Vehicle Routing with Random Consumption", ISERC, Orlando, FL, 2012.

[16]   Askin, R. G., M. Fu, J. Fowler, M. Zhang, "Qualification Methods for Semiconductor Assembly and Test Facilities", 19th Triennial IFORS Conference, Melbourne, Australia, 2011.

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[18]   Askin, R. G., M. Fu, J. Fowler, M. Zhang, "Integrated Capacity Allocation and Scheduling for Assembly and Test Facilities", Department of Industrial and Systems Engineering, National University of Singapore, Singapore, 2011.

[19]   Askin, R.G. "Global Challenges and Opportunities for Industrial Engineering and Operations Management in the 21st Century" Keynote Address, 2nd International Conference on Industrial Engineering and Operations Management, Kuala Lumpur, Malaysia, 2011 (invited).

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[21]   Askin, R. G., "Global Challenges in Production and Logistics for the 21st Century", Plenary Address, 5th International Conference on Production Research: Americas 2010, Bogota, Colombia, 2010 (invited).

[22]   Askin, R. G., "The Doctorate in Industry", Panel Presentation, IERC Doctoral Colloquium, Cancun, MX, 2010 (invited).

[23]   Askin, R. G., "Basic Principles of Manufacturing Systems", guest lecture in Production Engineering, Monterrey Tec, Monterrey, MX, 2010 (invited).

[24]   Askin, R. G., "Member and Task Assignment for Effective Work Teams", Dept. of Industrial Engineering, Clemson University, 2010 (invited).

[25]   Askin, R. G., "Challenges and Opportunities for Industrial/Manufacturing Engineering in the 21st Century", ELAIN 2009, Bogota, Colombia (invited talk, presented by video).

[26]   Askin, R. G., "Keys to a Successful OR Career", Panel Moderator and Presentation, INFORMS Regional Conference, Tempe, AZ, 2009.

[27]   Askin, R. G., "An Empirical Investigation of Global Supply Chain Design Strategies", Logistics and Distribution Institute, University of Louisville, Louisville, KY, 2009 and Department of Industrial and Systems Engineering, University at Buffalo, 2009 (invited).

[28]   Askin, R. G. "The Future of Engineering", Honeywell International, Phoenix, AZ 2009 (invited).

[29]   Askin, R. G. "Formation and Operation of Effective Teams in Cellular Manufacturing", Moving 2008 Congress, Hermosillo, MX, 2008 (invited).

[30]   Askin, R. G., "The Grand Challenges for IE and Their Implications for IE Education", Panel Discussion, IERC, 2008, Vancouver, CA, (invited).

[31]   Askin, R. G., "Building an Academic Reputation", IERC Doctoral Colloquium, 2008, Vancouver, CA (invited).

[32]   Askin, R. G. "Research Needs in Workforce Engineering", Panel Discussion, INFORMS, Seattle, WA, 2007 (invited).

[33]   Askin, R. G., "Human Issues in Forming and Operating Cells", Department of Industrial Engineering, Auburn University, 2007 (invited).

[34]   Askin, R. G., "Modeling the Effect of Random Outcomes in Multistage Decision Processes", International INFORMS Conference, Puerto Rico, 2007.

[35]   Askin, R. G., Panel Member, "Integrating Teaching and Research", Teaching Effectiveness Colloquium, INFORMS, Pittsburgh, PA, 2006 (invited).

[36]   Askin, R. G., Panel Member, "Early Career Tips for Academicians", Future Academicians Colloquium, INFORMS, Pittsburgh, PA, 2006 (invited).

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[38]   Askin, R. G. and S. Krishnan, "Selection of Inventory Control Points in Pull Production", IERC, Orlando, FL, 2006 (invited).

[39]   Askin, R.G., "Integrating Worker and Team Considerations into Cell Formation", Scott T. Poage Distinguished Lecture Series, University of Houston, 2006, and University of Arkansas, 2006 (invited).

[40]   Askin, R. G. and S. Krishnan, "Location and Sizing of Inventory Control Points in Pull Systems", IFORS Triennial Conference, Honolulu, HI, 2005.

[41]   Askin, R. G., "Involving Students in Physical Simulations of Manufacturing System Philosophies", Innovations in Manufacturing Engineering Education, San Luis Obispo, CA, 2005.

[42]   Chen, J. Q. and R. G. Askin, "Project Selection, Scheduling and Resource Allocation for Engineering Design Groups", IERC, Atlanta, 2005.

[43]   Askin, R. G., Plenary Address: "Modeling and Optimization of Human Behaviors", 4th IASTED International Conference on Modeling, Simulation and Optimization, Kauai, HI, 2004 (invited).

[44]   Askin, R. G., "Service", New Faculty Colloquium, IERC, Houston, 2004 (invited).

[45]   Askin, R. G., "Manufacturing Team Formation and Operation: Issues, Models, and Algorithms", Northwestern University and Texas A&M University, 2004, (invited).

[46]   Askin, R. G., "Operational Control of Manufacturing Cells", Tutorial presentation, 2003 World Symposium on Group Technology/Cellular Manufacturing, Columbus, OH (invited).

[47] Askin, R. G., "Forming Effective Teams Based on Individual Skills and Work Styles", 2003 World Symposium on Group Technology/Cellular Manufacturing, Columbus, OH.

[48] Askin, R. G., "Future Research in GT/CM", Panel Discussion, 2003 World Symposium on Group Technology/Cellular Manufacturing, Columbus, OH (invited).

[49] Askin, R. G., "Manufacturing Strategy and Competitiveness", Panel Moderator, 2003 World Symposium on Group Technology/Cellular Manufacturing, Columbus, OH (invited).

[50] Askin, R. G. "Towards a Complete Model for Manufacturing Cell Formation: Partitioning Resources" ISE Department, Virginia Tech, 2003 (Ingersoll Rand Invited lecture series).

[51] Askin, R. G., "Selecting and Scheduling of Multiple Resource Constrained Projects" INFORMS, San Jose, CA, 2002, (invited).

[52] Askin, R. G. "Assigning Workers to Tasks on Multifunctional Teams", INFORMS, San Jose, CA, 2002, (invited).

[53] Askin, R. G., "Integrated Production Planning and Control Systems", Society of Logistics Engineers, Tucson, AZ, 2001 (invited).

[54] Askin, R. G., "A Complete Model for Manufacturing Cell Formation", Dept. of Industrial Engineering, Hong Kong University of Science and Technology, Hong Kong, 2001 and Institute for Automation, Chinese Academy of Sciences, Beijing, 2001.

[55] Askin, R. G. and Y. Huang, "Modeling the Formation of Effective Worker Teams in Cellular Manufacturing", INFORMS, Salt Lake City, 2000 (invited), IERC, Cleveland, 2000 (invited), and Raytheon Missile Systems, Tucson, 2001 (invited).

[56] Askin, R. G., "The Future of GT/CM", Panel Presentation, Symposium on Group Technology and Cellular Manufacturing, San Juan, Puerto Rico, 2000.

[57] Askin, R. G., "Controlling Worker and Material Flow in Cellular Manufacturing", Tutorial, Symposium on Group Technology and Cellular Manufacturing, San Juan, Puerto Rico, 2000.

[58] Askin, R. G., Plenary Address: "The Philosophy of GT/CM", Symposium on Group Technology and Cellular Manufacturing, San Juan, Puerto Rico, 2000.

[59] Askin, R. G. and Y. Huang "Formation of Teams for Manufacturing Cells", Symposium on Group Technology and Cellular Manufacturing, San Juan, Puerto Rico, 2000.

[60] Askin, R. G. and M. Zhou, "Formation of Independent Flow Line Cells Based on Operation Requirements and Machine Capabilities", 8th IERC, Phoenix, 1999 (invited).

[61] Askin, R. G. and D. Madhavanur, "Lot-Splitting in Dynamic Flow Shops with Operator Assisted Moves", 8th IERC, Phoenix, 1999.

[62] Askin, R. G., "Operational Methods for Manufacturing Cells", Department of Industrial Engineering Seminar Series, North Carolina State University, Raleigh, NC, 1999 (invited) (also presented at INFORMS, Philadelphia, 1999).

[63] Askin, R. G., "On the Use of Transfer Batches in Flow Shops", Innovation '99 Conference, Halifax, Nova Scotia, 1999.

[64] Askin, R. G., Luncheon Keynote Address: "Industrial Engineering: Global Opportunities for the Millenium", Innovation '99 Conference, Halifax, Nova Scotia, 1999, (invited).

[65]   Askin, R. G., "Towards a Complete Model for Designing Manufacturing Cells", United Technologies Seminar Series, Dept. of Manufacturing Engineering, Boston University, 1998 (invited) (also given at Northwestern University, 1999).

[66]   Askin, R. G., "The Impact of Minor Setups on the Sizing of Transfer Batches", INFORMS, Seattle, 1998 (invited).

[67]   Askin, R. G., "Integration, Controls and Design: State of the Art in Research", 5th MHRC, Phoenix, AZ 1998 (invited).

[68]   Askin, R. "Design of Fractal and Holonic Cellular Layouts", IERC, Banff, 1998 (invited).

[69]   Askin, R., "The Effect of Size on Agility", IERC, Banff, 1998 (invited).

[70]   Askin, R., "Cellular Manufacturing: Is There a Gap Between Theory and Practice", Panel Discussion, IERC, Banff, 1998 (invited).

[71]   Askin, R. "Introduction to Industrial Engineering at The University of Arizona", Panel Discussion, IERC, Banff, 1998 (invited).

[72]   Askin, R., "The Impact of Setup and Material Handling on Transfer Batch Sizing", POMS, Santa Fe, 1998.

[73]   Askin, R., F. Ciarallo and N. Lundgren, "A Comparison of Process, Fractal and Holonic Layout Strategies, INFORMS, Dallas, 1997 (invited).

[74]   Askin, R. "IE Research: What's Hot and What's Not", 5th IERC, Minneapolis, 1996, (invited panelist).

[75]   Askin, R. "Cellular Manufacturing: Lessons From a Survey", INFORMS, New Orleans, 1995 (invited).

[76]   Askin, R. and M. Zhou, "An Operation Requirements Driven Cell Design Method" INFORMS, New Orleans, 1995 (invited).

[77]   Askin, R. "Integrating Design and Control Issues in Cellular Manufacturing" INFORMS, New Orleans, 1995, (invited panelist).

[78]   Askin, R. and M. Zhou, "Selection of Machines and Allocation of Operations in a Flexible Manufacturing Cell Flow Line, INFORMS, New Orleans, 1995 (invited).

[79]   Askin, R. "Economic Models for the Design of Cellular Mfg. Systems", Dept. of Industrial Engineering, Texas A&M University, (invited), 1995.

[80]   Askin, R. and A. Iyer, "A Comparison of Scheduling Strategies for Serial Flow Line Cells", ORSA/TIMS Detroit, (invited), 1994.

[81]   Askin, R. "Research Needs in Material Handling: Systems Modeling", International Mechanical Engineering Congress, Chicago, IL (invited), 1994.

[82]   Askin, R. and A. Iyer, "Scheduling Strategies for Manufacturing Cells", EURO XIII, Glasgow, Scotland (invited), 1994.

[83]   Askin, R., M. Dror, and A. Vakharia, "PCB Family Grouping and Component Allocation in Multimachine, Open Shop, Assembly Cells", 2nd Annual Border Conf. on Manufacturing and the Environment, El Paso, TX (invited), 1994.

[84] Askin, R. and S. Jagdale, "Manufacturing Engineering Education and Research at the Univ. of AZ", Tucson Chapter of SME, (invited), 1994.

[85] P. Dell'Olmo, R. Askin, "Minimum Makespan Task Sequencing with Multiple Shared Resources", ORSA/TIMS Phoenix, (invited) 1993, and EURO XIII Glasgow, (invited), 1994.

[86] Askin, R., H. Selim, A. Vakharia, "Measures of Flexibility for Cellular Manufacturing Systems", ORSA/TIMS Phoenix, (invited) 1993.

[87] Askin, R., A. Iyer, "A Comparison of Scheduling Approaches for Manufacturing Cells", ORSA/TIMS Chicago, (invited) 1993, and Dept. of Industrial Engineering, Lehigh University, (invited), 1994.

[88] Askin, R., M. Sodhi, A. Agnetis, "Determining Machining Sequences for Manufacturing Cells", ORSA/TIMS Chicago, (invited) 1993.

[89] Askin, R. G., M. Sodhi, J. Ramberg, O. Sheng, "Allocation of Human Resources to Design Teams for Concurrent Engineering", ORSA/TIMS Orlando and University of Iowa (invited), 1992.

[90] Sodhi, M., R. G. Askin and S. Sen, "Solving Short Range Production Problems", ORSA/TIMS Orlando, 1992.

[91] Askin, R. G., M. Dror and A. J. Vakharia, "Electronic Component Insertion" ORSA/TIMS Orlando, (invited) 1992.

[92] Askin, R. G. and A. Iyer, "A Comparison of Labor Assignment and Scheduling Policies for Manufacturing Cells", Decision Sciences and Engineering Systems Department, Rensselaer Polytechnic Institute (invited), 1992, also Quantitative Business Analysis Department, Arizona State University (invited), 1993.

[93] Askin, R. G. and M. G. Mitwasi, "Determining the Number of Kanbans in JIT InventorySystems", Operations Research Seminar, North Carolina State University, also joint seminar, Colleges of Business and Engineering, The University of Rhode Island (invited), 1992.

[94] Askin, R. G.,and M. Sodhi, "An Hierarchical Control Scheme for Flexible Manufacturing Systems", Dept. of Industrial Engineering, Lehigh University, 1992.

[95] Askin, R. G., "Engineering Against the Tide: The Implications of Physical Laws for Manufacturing Systems", Arizona State University, 1991.

[96] Askin, R. G., O. Sheng and J. Ramberg, "Information Systems Design for Engineering Design Systems", Portland Int'l Conference on Management of Engineering and Technology (invited), 1991.

[97] Demmel, J. G. and R. Askin, "A Multiple Objective Decision Model for the Evaluation of Advanced Manufacturing System Technologies", Anaheim ORSA/TIMS, 1991.

[98] Selim, H., A. Vakharia and R. Askin, "Mathematical Models for Cell Formation", Nashville ORSA/TIMS (invited), 1991.

[99] Askin, R. G. and A. Krisht, "Optimal Design of Manufacturing Systems via Queueing Network Models", Nashville ORSA/TIMS, 1991, and First IE Research Conference (invited), 1992.

[100] Creswell, S., J. Goldberg and R. Askin, "Bay and Sequence Design for Surface Mount Machines", Las Vegas ORSA/TIMS (invited), 1990.

[101] Mitwasi, M. G. and R. G. Askin, "Modeling Muli-Item, General Structure KANBAN Systems", Las Vegas ORSA/TIMS, 1990.

[102]   Askin, R. G., "Implementing Statistical Process Control in Manufacturing", Technology'90, Mesa, AZ (invited), 1990.

[103]   Askin, R. G., "Capacity Planning and Flow Control for Electronics Manufacturing", Technology '89, Mesa, AZ (invited), 1989.

[104]   Vakharia, A.J., R. G. Askin and S. Sen, "A Mathematical Programming Approach to Cell Formation", New York ORSA/TIMS, 1989.

[105]   Askin, R. G.,"Career Enhancement Through ASQC Division Participation", ASQC Section 707, Tucson, AZ (invited), 1988.

[106]   Askin, R. G. and M. G. Mitwasi, "Capacity Planning, Process Planning and Group Formation", Denver ORSA/TIMS (invited), 1988.

[107]   Askin, R. G., "Applications of Queueing Network Models in Manufacturing", Technical Forum, National Semiconductor, Tucson, AZ (invited), 1988.

[108]   Goldberg, J. B. and R. G. Askin," The Economics of Modular Design", St. Louis ORSA/TIMS, 1987.

[109]   Askin, R. G., and S. Chiu, "Economic Group Technology Configuration", St. Louis ORSA/TIMS, 1987.

[110]   Askin, R. G., "Promotion and Tenure: Goal or Game," Panel Discussion, New Orleans ORSA/TIMS, 1987.

[111]   Askin, R. G., "Integrated Facilities, Process and Production Planning," New Orleans ORSA/TIMS, also Purdue University and National Technological University, (invited), 1987.

[112]   Askin, R. G., "An Economic Heuristic for Group Technology Configuration," ORSA/TIMS, Atlanta, Georgia, 1985.

[113]   Askin, R. G., "POPS: A Production Operations Planning System," ORSA/TIMS, San Francisco, CA, 1984, also IFORS, Washington D.C., 1984.

[114]   Askin, R. G., "Selecting a Biased Regression Model," International Forecasting Symposium, Philadelphia, PA, 1983 (invited).

[115]   Askin, R. G., "The Relationship of Lot-Sizing and Workload Variability," ORSA/TIMS, Chicago, IL, 1983.

[116]   Askin, R. G., "Productivity in Production Scheduling," IIE Region VIII Annual Conference, Cedar Rapids, IA, 1982 (invited).

[117]   Askin, R. G., "The Utility of Stochastic Inventory Models," IIE Fall Technical Conference, Cincinnati, Ohio, 1982 (invited).

[118]   Askin, R. G., "A Generalized Ridge Regression Trace," Joint Annual Meetings of the American Statistical Association and Biometric Society, Detroit, MI, 1981.

[119]   Askin, R. G., "Multicollinearity in Regression Review and Examples," International Forecasting Symposium, Quebec, Canada, 1981.

[120]   Askin, R. G., "Handling the Coexistence of Multicollinearity and Nonnormality in Regression," Joint Annual Meetings of the American Statistical Association and Biometric Society, Houston, Texas, 1980.

[121]   Askin, R. G., "An Analysis of Constrained Robust Regression Estimators," Department of Statistics, The University of Iowa, 1979.

Other Significant Research and Education Workshop Participation:

o   *Sandia National Labs University Open House,* Albuquerque, NM, 2012.

o   *CRA (Computing Research Association) Conference at Snowbird,* 2010, 2012, 2014.

o   *NSF/AFOSR Workshop on Dynamic Data-Driven Application Systems*, Washington, DC, 2010.

o   *Engineering Education Leadership Institute*, Chicago, IL, 2006.

o   *CONDIE* (Committee on the Next Decade in IE) Workshop, Ann Arbor, MI, 2006.

o   *Workshop on Real Time Transportation Logistics*, Long Beach, CA, 2002 (Breakout session leader).

o   *NSF Workshop on Service Enterprise Systems*, Atlanta, GA, 2001 (Breakout session leader).

o   *Global Manufacturing Education for the 21st Century*, Arizona State University, 1996.

o   *Research Needs in Electronics and Semiconductor Manufacturing*, Texas A&M University, 1992.

o   *University Programs in Computer Aided Design, Engineering and Mfg.*, Lehigh University, 1984.

o   *Conference on Statistical Education for Engineers*, University of Iowa, 1984.

o   *NSF Short Course for Teachers of Combinatorial Probability*, University of Iowa, 1983.

Published Reviews and Editorials:

[1]   Askin, R. G., Monthly editorial summary of *IIE Transactions* papers in *Industrial Engineer*, 2013 – 2016.

[2]   Askin, R. G., "Phoenix INFORMS 2012 Annual Meeting", *ORMS Today*, June, 2012, pp. 41-42.

[3]   Askin, R. G., A. Dolgui, J.-M. Proth, editorial, "Introduction to Design and Analysis of Production Systems", *Int. J. of Production Economics*, 120, 2009, pp. 271-275.

[4]   Askin, R. G., ed. "Factory" and "Systems Analysis" articles in *World Book Encyclopedia*, 2006.

[5]   Askin, R. G., "Fast Food Update" in Ask the Expert, *Industrial Engineer*, 37(2), 2005, p. 50.

[6]   Askin, R. G. "Tracking Downtime" in Ask the Expert, *Industrial Engineer*, 36(2), 2004, p. 50.

[7]   Askin, R. G., ed., "Assembly Lines", "Industrial Design" and "Manufacturing" articles in *World Book Encyclopedia*, 1989.

[8]   *Operations Research/Management Science*, eight articles reviewed, 1981-87.

[9]   *Quality Control/Applied Statistics*, five articles reviewed, 1981-87.

[10]   Askin, R. G., Review of *Prediction and Improved Estimation in Linear Models*, by John Bibby and Helge Toutenburg, *Journal of Quality Technology*, 12, 1980, pp. 177-178.

[11]   Askin, R. G., Review of *Handbook for Linear Regression*, by Mary Sue Younger, *Journal of Quality Technology*, 12, 1980, pp. 55-56.

SERVICE:

National/International:
       American Society for Quality Control/American Society for Quality
              West Coast National Quality Month Committee 1988-1993
              Statistics Division Secretary, 1984-1986, Chair-Elect, 1986-1987, Chair, 1987-1988
              Statistics Division Program Chairman, 1983
              Statistics Division Newsletter Editor, 1981-1983
              Statistics Division Councilor, 1980-1985
       College-Industry Council on Material Handling Education, member 1987-1993
       Institute of Industrial Engineers/Institute of Industrial and Systems Engineers
              Editor-in-Chief, *IIE Transactions*, 2013 – 2016
              CIEADH Chair Elect, 2010-2011, Chair 2011-2012, Past Chair 2012-2013
              CIEADH Awards Committee, 2011-2013
              Sr. VP for Continuing Education (and Board of Trustees member), 2007 – 2009
              Track Chair, IIE Transactions Best Papers, ISERC, 2015, 2016, 2017.
              Track Co-Chair, Manufacturing, IERC, 2009.
              Chair, IIE Council of Fellows Selection Committee, 2005-2007
              Board Member, Arizona Chapter, 2004-2005, V. P. 2005-2006, 2009-2010, Pres. 2007-2008
              Council of Fellows, Scribe, 2004-2005, Chair-Elect, 2005-2006, Chair 2006-2007
              CIEADH IERC Coordinating Committee, 2003-2006, Chair 2005-2006
              Program Committee, *IE Research Conference*, 2003, 2004
              Editorial Board, *IIE Solutions*, 1999 – 2002
              Advisory Board, Manufacturing Division, 1998 – 2001
              Program Chair, *IE Research Conference*, Minneapolis, MN, 1996
              Editor, *IIE Trans. Focused Issue on Design and Manufacturing*, 1995-1997
              Editor, *IIE Trans. Special Issue on Agile Manufacturing*, 1997
              IIE P & IC Division Councilor, 1983-1985
              Department Editor, *IIE Transactions*, 1987-1995, 1997-2000
              CIEADH Representative for University of Arizona 1991-2005, Arizona State Univ. 2006-present.
              Associate Editor, *IIE Transactions*, 1981-1987
       Operations Research Society of America
              Tech Section on Manufacturing Management Chair, 1995
              Tech Section on Manufacturing Management Chair Elect, 1994-1995
              Tech Section on Manufacturing Management Newsletter Editor, 1992-1994
              Phoenix ORSA/TIMS Program Co-Chair, Fall 1993
              Organizer and Chair of invited conference sessions
       Institute For Operations Research and Management Science (INFORMS)
              Vice President for Meetings and Chair of INFORMS Meetings Committee, 2015 -.
              Member, Sections/Societies Committee 2016-.
              General Chair, INFORMS 2012 Conference, Phoenix.
              IFORS Board Representative, 2011.
              Advisory Council, INFORMS Practice Conference, Phoenix, 2009.
              Cluster Co-chair for Workforce Engineering, INFORMS Conference, Seattle, 2007.
              ACORD (Academic Chairs of Operations Research Departments) Secretary/Treasurer, 2002-2003,
                  President, 2003-2005
              Cluster Chair for Production Management, INFORMS Conference, Hong Kong, 2006.
              Cluster Chair for Manufacturing Systems, INFORMS Conference, San Jose, CA, 2002
              Manufacturing and Service Operations Management Society, Vice President, 1995-1996,
                  President Elect 1999-2000, President 2000-2001
       International Federation of Automatic Control (IFAC)
              Member of TC 5.2 Manufacturing Modelling for Management and Control, 2015 -.
       Society of Manufacturing Engineers

Journals Committee, 1999 – 2006

Associate Editor, *J. of Manufacturing Systems*, 1994-1999

International Program Committee and Track Co-Chair, 12th IFAC Symposium on Information Control Problems in Manufacturing (INCOM'2006), St. Etienne, France.

Co-Editor, Special Issue of *International Journal of Production Economics* on "Design and Analysis of Production Systems", 2009.

International Program Committee and Track Co-Chair, 13th IFAC Symposium on Information Control Problems in Manufacturing (INCOM'2009), Moscow, Russia

International Program Committee, 14th IFAC Symposium on Information Control Problems in Manufacturing (INCOM'2012) Bucharest, Romania.

International Program Committee, 16th IFAC Symposium on Information Control Problems in Manufacturing, (INCOM'2018), Bergamo, Italy.

Program Committee, International Conference on Industrial Engineering and Production Management, Quebec, Canada, 2001; Porto, Portugal, 2003.

Organizing Committee, Symposium on Group Technology and Cellular Manufacturing, Puerto Rico, 2000; Columbus, OH, 2003.

Editorial Board, *Robotics and Computer Integrated Manufacturing*, 1999 – 2002.

Program Committee, Sixth Int'l. Conference on Agile, Intelligent & Computer Int. Mfg., Troy, NY, 1998.

Program Committee, Productivity in a World Without Borders Conference, Montreal, Canada, 1995.

Editorial Board, *International Journal of Industrial and Systems Engineering*, 2006-present.

Advisory Board Member, Univ. of Wisconsin Dept. of Industrial & Systems Engineering, 2009-2013.

International Program Committee, 8th International Conference on Informatics in Control, Automation and Robotics, Noordwijkerhout, The Netherlands, 2011.

International Program Committee, International Conference on Operations Research and Enterprise Systems, Algarve, Portugal, 2012; Barcelona, Spain 2013; Angers, France, 2014; Porto, Portugal, 2017.

Program Committee, International Conference on Informatics in Control, Automation and Robotics, ICINCO 2011 The Netherlands; 2012 Rome.

International Program Committee, IFAC Conference on Manufacturing Modeling, Management and Control, St. Petersburg, Russia, 2013 (7th); Troyes, France, 2016 (8th).

Advisory Committee, Fourth International Conference on Industrial Engineering and Operations Management, Bali, Indonesia, 2014.

Local:

Catalina Foothills School District Foundation, Treasurer, 1993-1995

Tucson Cooperative Technologies, Board Member, 1993

IIE Membership Chairperson (So. Arizona Chapter) 1988

IIE Vice President for Programs (So. Arizona Chapter) 1987

IIE Chapter President (Arizona Chapter) 2008

University:

Preparing Future Faculty Program,

Panel Member on Academic Search Process, 2010 - 2013;

Mock Interviews, 2011

Member, Committee on Statistics, 2005

Steering Committee for Graduate Interdisciplinary Program in Statistics, 2004-05

College of Business and Public Administration Dean Search Committee 2004

Committee on Faculty Membership 2003-2005

Faculty Reward and Responsibilities Committee 1994

Committee on Graduate Studies 1990-1995, 2000 – 2003

Reliability Program Committee 1987-1997

College:

Academic Standards Committee, 2006-2007

Chair, Civil & Environmental Engr. Department Chair Search Committee, 2006-2007

Chair, Aero. & Mechanical Engineering Department Head Search Committee, 2000-2001

Director, Program in Advanced Integration of Manufacturing Systems and Technologies, 1993-1998
Ad Hoc Committee on Continuing Status of Academic Professionals, 1995
Faculty Status (P&T) Committee, 1994-1996
Strategic Long Range Planning Committee, 1992-1993
College Curriculum Committee 1989-1991

Department/Program:
Grand Challenge Scholar Advisor 2012
Associate Department Head 1992-1995, 1997-1998; Acting Department Head 1996
Graduate Programs Committee 1992-1998, (Chair 1993-1998)
Faculty Recruiting Committee 1990/91, 1997/98
Faculty Status Committee 1990/91, 1995 -1998
Department Head Review Committee 1995
Undergraduate Program 1986-1993, (Chair 1989-1991)
Department Head Search Committee 1987-1988, 1988-1989
ABET Preparation Committee 1989

Other University Service/Teaching Activities:
Raytheon On-Site Industrial M.S. Graduate Program, Established 1996, Coordinator 1996-2004
Flinn Scholar Mentor 1987-1989
APEX Mentor 1988-1990
GM Architectural Design Competition (IE Advisor) 1987 - Received third place nationally
Mathematical Competition in Modeling (Advisor)
    1988 - Received Honorable Mention
    1987 - Received Honorable Mention

Professional Publications and Organizations Served as Referee:
ACM Transactions on Modeling and Computer Simulation
Annals of Operations Research
Applied Mathematical Modelling
Applied Stochastic Models and Data Analysis
Asia Pacific Journal of Marketing and Logistics
Computer Integrated Manufacturing Systems
Computers and Mathematics with Applications
Engineering Economist
Engineering Optimization
European Journal of Operations Research
IBM Journal of Research and Development
Factory Automation and Information Management Conference
IEEE Transactions on Automatic Control
IEEE Transactions on Automation Science and Engineering
IEEE Transactions on Engineering Management
IEEE Transactions on Knowledge and Data Engineering
IEEE Transactions on Robotics and Automation
IIE Transactions
IE&M Press
IIE Student Paper Competition
Industrial Engineering Research Conference
INFORMS JFIG Paper Competition
International Conference on Informatics in Automation, Control and Robotics
International Journal of Production Planning and Control
International Journal of Production Research
International Journal of Production Economics
Journal of Computing & Information Science, ASME Transactions
Journal of Design and Manufacturing
Journal of Manufacturing Systems

Journal of Operations Management
Louisiana Board of Regents Support Fund R&D Program
Management Science
Manufacturing and Service Operations Management Journal
Material Handling Institute
Mathematical Problems in Engineering
MSOM Conference
National Science Foundation
National Research Council
National Sciences and Engineering Research Council of Canada
Naval Research Logistics
Operations Research
OMEGA: The International Journal of Management Science
Optimization and Engineering
Production and Operations Management
Production Planning and Control
Research in Engineering Design
RGC: University Grants Committee of Hong Kong
Shingo Prize for Manufacturing Research
SME Summit Technical Paper Competition
Technometrics

Universities Served as External Program Evaluator
Rutgers University
Virginia Polytechnic Institute and State University
University of Oklahoma
University of the West Indies, Trinidad
Colorado School of Mines

Served as external reviewer for numerous University Promotion & Tenure committees

Served as a committee member on numerous PhD Dissertations and MS Theses

Organizer and chair of numerous invited conference sessions

References provided upon request